SELECTION OF NEUROSTIMULATOR PARAMETER CONFIGURATIONS USING GENETIC ALGORITHMS

ABSTRACT

In general, the invention is directed to a technique for selection of parameter configurations for a neurostimulator using genetic algorithms. The technique may be employed by a programming device to allow a clinician to select parameter configurations, and then program an implantable neurostimulator to deliver therapy using the selected parameter configurations. In operation, the programming device executes an electrode configuration search algorithm to guide the clinician in the selection of electrode configurations. The search algorithm relies on a genetic algorithms to identify potential optimum electrode configurations within an electrode set. The genetic algorithms provide guidance in the electrode configuration selections process, interactively guiding the clinician by suggesting the configurations that are most likely to be efficacious given the results of tests already performed during an evaluation session.